Ligature of Right Bronchus.

The experiment was performed with the chest open and under artificial ventilation. There was no immediate effect on the carotid blood pressure (unless there had been mechanical interference with the heart during the operative procedures, when there was a fall); during the next few minutes, however, it showed a slow rise, which was undoubtedly anoxaemic in origin, and was usually stopped by increasing the ventilation. Sometimes, in spite of full ventilation, the rise was maintained. At other times the carotid pressure was maintained steady, but the effects of the anoxaemia were seen in the fall of pulse rate and increase in the pulse pressure, increasing the ventilation then bringing about the reverse changes.

The pulmonary blood pressure showed a small immediate rise, which might not be maintained, or was merged in a further late rise, accompanying the carotid pressure rise; like the latter, an increase in the ventilation now caused a fall. Sometimes the pulmonary pressure rose independently of the carotid. The saturation of the blood was under 90 per cent. in these experiments, in spite of the fact that the ventilation had been increased. The small rise in pulmonary blood pressure suggests that some circulation is still occurring through the right lung, and this is confirmed by the low blood saturation.

Investigations on the effects of ligature of a bronchus on the pulmonary blood pressure and blood saturation are still proceeding.

SUMMARY AND CONCLUSIONS.

1. Ligature of the left pulmonary artery in cats (with the chest open and under artificial ventilation) causes a rise of pulmonary blood pressure of from 25 per cent. to 60 per cent.—usually about 40 per cent. There is no effect on the carotid blood pressure, pulse rate, output of the heart, or its state of dilatation.
2. The healthy heart therefore can accommodate itself without difficulty to sending the same volume of blood through one lung only in a given time, as it previously sent through both.
3. No mechanism producing slowing of the heart from rise of pulmonary blood pressure was demonstrated in these experiments.
4. If the chest is closed after the artery has been ligatured, the animal remains in good condition—in fact, frequently its condition is improved. Its respiratory rate is usually faster than normal, frequently about double, but the depth tends to be shallow.
5. The saturation of the blood after ligature is about 75 per cent.; if the artificial ventilation is increased (within normal limits), complete saturation can be obtained. This has not been the case, however, with animals in which the chest has been closed and the artificial ventilation discontinued; in these the saturation remains at about 70 per cent.
6. Examination of the lungs shows an increased quantity of blood in the right lung, due to twice the normal volume flowing through it in a given time. The left lung after ligature of the left pulmonary artery, under artificial ventilation, contains almost no blood, except a little in the veins; on the other hand, after the chest has been closed and the animal allowed to breathe naturally, it contains usually more blood than the right lung, exhibiting a varying degree of congestion. This blood comes from the bronchial arteries and stagnates in the pulmonary capillaries.
7. Ligature of the right bronchus (in cats with the chest open and under artificial ventilation) causes a small immediate rise in pulmonary blood pressure without affecting the carotid pressure.
8. The saturation of the blood has always been under 90 per cent., even when the artificial ventilation has been increased.
9. There is, therefore, presumably still a certain amount of circulation through the right lung under these conditions.

Investigation is still proceeding on the following points:

- (a) The degree of saturation of the blood, after the left pulmonary artery has been tied and the chest closed.
- (b) The effects of ligature of a bronchus on the pulmonary blood pressure and the blood saturation, since the observations in this series are as yet few.

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A NOTE ON THE EARLY RECOGNITION AND CORRECTIVE TREATMENT OF OCCIPITO-POSTERIOR PRESENTATIONS.

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It does not seem to be generally known that for those who have the opportunity to see a case of occipito-posterior presentation in the week before delivery or very early in labour, it is possible to make an exact diagnosis by external palpation and to correct it by external methods. In the application of the routine four hand-grips in palpation the bilateral grip shows the lateral lie of the trunk, and, in addition, the extra facility with which the limbs may be felt may awaken the suspicion of possibly posterior occiput. The exact recognition is then frequently practicable by a modification of the two-handed pelvic grip. The symmetrically laid hands sink directly backwards from the line of the pubic bones, and from the relatively greater sink on one side the oblique diameter in which the head tends to lie may be defined. When the diameter and the side on which the trunk lies are the same, both right or both left, the posteriority is definite. In the next step the hands are again symmetrically placed, but, instead of sinking back from the pubic level, they are withdrawn upwards. The attitude of the head, the extent of its flexion, is shown by the inclination, to the horizontal line of the pubic brim, of the line in which the hands cease to feel the head, the occipito-mental base.

The external treatment is simple and usually successful. A binder is laid under the patient and two towel pads are prepared. The first is rolled to about the thickness of a forearm, the second is folded to a flat pad 6 or 7 inches square. The rolled pad is pinned to the binder in such a position that when the binder is firmly secured the pad will lie close in front of the anterior superior iliac spine behind and parallel to the trunk. The flat pad is pinned so as to lie on the limbs, pressing them backwards. It is sometimes useful to roll the patient to the side opposite the trunk and by hand bring the trunk as far as may be over to that side. The binder is then pulled firmly home. If the patient is actually in labour nothing more may be needed, but if she is still on foot the binder should be steadied by thigh-bands and the correctness of its position frequently supervised. When in bed the patient should be encouraged to lie on the side opposite to the trunk, but her comfort is a prior consideration.

The success I have experienced from this method of treatment is so high that the usually described method of correction by manual reposition from the vagina is now rarely needed. The actual manipulations in this latter replacement are perhaps not personally familiar to some of the writers who describe it. In a very recently issued diagram the operator is shown using his right hand internally and, with obvious gaucherie, the left hand externally in a right occipito-posterior presentation. The correct method of standing on the patient's left side and using the left hand internally is shown by Munro Kerr in *Operative Midwifery*. For a left occipito-posterior case the stand should be on the right and the right hand used internally, when the patient is in the dorsal position.

ACCORDING to the *Deutsche medizinische Wochenschrift* the venereal disease clinics in Berlin were attended by 6,454 persons in 1918, by 22,338 in 1919, and by 23,819 in 1920. The venereal disease clinics throughout Germany were attended by 27,000 persons in 1918, and by 95,000 in 1919.

In December, 1921, the Société de Médecine de Paris will award the Duparcque Prize of 3,000 francs to the author of the best essay in French on the methods of determining the functional activity of the liver, and their applications to medicine, surgery, and obstetrics. The Guillon Prize of 300 francs will be awarded by the same society for the best essay on diseases of the urinary tract.